

ALLERGENIC CROSS-REACTIVITY OF LATEX AND FOODS

A compilation from the literature

Allergic reactions to natural rubber latex comprise both delayed and immediate (IgE-mediated) hypersensitivities, producing clinical symptoms ranging from contact urticaria and bronchial asthma to anaphylactic shock. Natural rubber prepared from the milky sap (latex) of the tree *Hevea brasiliensis* is a common component of numerous home products and medical supplies, including surgical gloves and catheters. While delayed hypersensitivity reactions to latex-containing products are often traced to additives and stabilizers employed for their production, immediate reactions are closely associated with endogenous protein components of the natural rubber latex materials.

Recently, coincident IgE-mediated allergies to latex and multiple fruits or vegetables have been documented. *In vivo* and *in vitro* investigations of clinical specificity have produced complex patterns of allergenic cross-reactivity (suggesting shared or common antigenic components) among botanically-unrelated allergens such as latex and foods. While the details of the clinical association of latex and food allergies await further study, documentation of food allergies known to coexist with latex sensitivities may be useful for identifying the risks of latex exposure for some patients.

Listed below are the allergens reported to be associated (clinically or immunochemically) with natural rubber latex.

Degree of Association or Prevalence:

<u>High</u> (4)	<u>Moderate</u> (7)	<u>Low or undetermined</u> (33)		
Banana	Apple	Pear	Mango	Sweet Pepper
Avocado	Carrot	Peach	Rye	Cayenne Pepper
Chestnut	Celery	Plum	Wheat	Shellfish
Kiwi	Papaya	Cherry	Hazelnut	Sunflower Seed
	Potato	Pineapple	Walnut	Citrus Fruits
	Tomato	Strawberry	Soybean	Coconut
	Melons	Fig	Peanut	Chick Pea
		Grape	Buckwheat	Castor Bean
		Apricot	Dill	Lychee
		Passion Fruit	Oregano	Zucchini
		Nectarine	Sage	Persimmon

Simultaneous occurrence of allergies to certain pollens and foods described above have also been documented in reports independent of those focusing on natural rubber latex. Significant levels of allergenic cross-reactivity have been demonstrated for the allergen groups listed below:

Mugwort with Carrot, Celery, Apple, Peanut and Kiwi

Birch with Apple, Pear, Peach, Cherry and Hazelnut

Grasses with Potato

Ragweed with Banana and Melons

References available upon request